

AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method for a prophylaxis or a treatment of inflammation of an airway of an animal, said method comprising administering to said animal, an effective amount for said prophylaxis or treatment of an agent a peptide having a sequence comprising SLIGRL (SEQ ID NO:2) or a peptide analog thereof in which one or more amino acids is replaced with non-natural amino acid, wherein said peptide is capable of activating an airway epithelium protease activated receptor-2 (PAR2) under conditions sufficient for activation of said PAR2 to occur, thereby mediating relaxation of said airway.

2. (Previously presented) The method according to Claim 1 wherein the animal is a human.

3. (Canceled)

4. (Canceled)

5. (Currently amended) The method according to Claim 1 wherein the inflammation of the airway is caused by a disease condition is a disease selected from the group consisting of asthma, bronchitis, hayfever, alveolitis, ciliary dyskinesia and pulmonary inflammation.

6. (Currently amended) The method according to Claim 1 wherein the ~~agent is a peptide comprising~~ comprises the sequence of SEQ ID NO. 2 ~~or SEQ ID NO:3.~~

7. (Previously presented) The method according to Claim 6 wherein the peptide is modified to permit entry across an epithelial and/or subcutaneous layer.

8. (Previously presented) The method according to Claim 7 wherein the peptide is fused to penetratin.

9. (Currently amended) The method according to Claim 7 wherein the peptide is fused to TAT, ~~a functional derivative or homologue thereof.~~

Claims 10-19 (Canceled)

20. (Currently amended) A method of identifying an agent for treatment or prophylaxis of inflammation of an airway of an animal, comprising:

exposing PAR2 to the agent; and

Appl. No. : 09/787,356
Filed : June 25, 2001

measuring the ability of the agent to activate the PAR2 ~~determining whether the agent activates PAR2~~, wherein the agent ~~can be used~~ is identified as useful for said treatment or prophylaxis of inflammation of an airway of an animal if it does have the ability to activate PAR2.

21. (New) The method of Claim 1, wherein said peptide incorporates a non-natural amino acid.

22. (New) The method of Claim 1, wherein said peptide incorporates a non-natural amino acid listed in Table 2.

23. (New) A method for a prophylaxis or a treatment of inflammation of an airway of an animal, said method comprising administering to said animal, an effective amount for said prophylaxis or treatment of a peptide having a sequence comprising SLIGRL (SEQ ID NO:2) or a peptide derivative thereof having similar biological activity to SLIGRL, wherein said peptide is capable of activating an airway epithelium protease activated receptor-2 (PAR2) under conditions sufficient for activation of said PAR2 to occur, thereby mediating relaxation of said airway.